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## Obituary

Pavel Iosad, Maria Koptjevskaja-Tamm\*, Alexander Piperski  
and Dmitri Sitchinava

# Depth, brilliance, clarity: Andrey Anatolyevich Zaliznyak (1935–2017)

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The renowned Russian linguist, a fellow of the Russian Academy of Sciences Andrey A. Zaliznyak (Андрей Анатольевич Зализняк)<sup>1</sup> passed away on 24 December 2017 in Moscow. Zaliznyak's main working place was the Institute of Slavic Studies at the Russian Academy of Sciences, but he was also professor at Moscow State University. He made numerous and diverse important discoveries in morphology and historical linguistics and was instrumental in shaping linguistics education in the Soviet Union and in post-Soviet Russia. He laid much of the groundwork for the environment which enabled linguistic typology and language documentation to flourish there.

Zaliznyak was born in Moscow on 29 April 1935. When he was a pre-schooler, his mother was advised not to teach him German because he had no talent for foreign languages. However, as a teenager he developed an ardent passion for languages and learned Polish, Latin, English, Italian, and Spanish.

1 Common Romanization versions of his name (pronounced [zəl'iz'njak]) include, among others, Andréi Zalznjak and Andrej Zaliznjak. In this paper, we adhere to an Anglicized orthographic transcription for Russian personal names and to scientific transliteration (Timberlake 2004) for all other purposes, including article and book titles as well as examples.

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He studied French at the Lomonosov State University in Moscow and had the chance to visit Paris in 1956–1957, which was a rare opportunity for a Soviet citizen in those days. He studied with André Martinet, whose book *Économie des changements phonétiques* (1955) he was to translate into Russian a couple of years later (Martinet 1960). His work in Paris, where he also taught Russian to French speakers, led him to the conclusion that a formalized and complete description of Russian inflectional morphology still remained a desideratum. He offered such a description in an appendix to a Russian-French dictionary (Zaliznyak 1961) and expanded it in his seminal book *Russian nominal inflection* (1967), based on his doctoral (candidate, in the Russian system) thesis, for which he was, unusually, awarded the higher doctorate (the Russian equivalent of the German *Habilitation*) straight away. This work culminated in the *Grammatical dictionary of Russian* (1977), which contains a definitive description of Standard Russian inflection patterns, still unsurpassed, due to its depth and precision. It remains widely used both as a reference and as a tool for natural language processing for Russian; the achievement is made all the more impressive by the fact that Zaliznyak did all the work by hand, collating the data on slips of paper.

Zaliznyak's work on morphology adopted a derivational architecture, in which the attested forms in a paradigm were produced from an abstract representation of the lexeme by the application of a battery of rewrite rules. This was in stark contrast to the approach to morphology and phonology current in the Soviet Union at the time, which eschewed notions such as paradigms and derivation and instead adopted a declarative perspective, where words were exclusively analyzed as strings of phonemes and morphemes.

The success of Zaliznyak's framework demonstrated the viability of derivational architecture, and similar models were later adopted by many scholars working on Russian and on other languages. Particularly important in the present context is the fact that versions of this 'dynamic' approach were used in several grammars of underdescribed languages by the Moscow typology school, starting with the description of the morphophonological system of the Daghestanian language Archi in the by now classic work by Kibrik et al. (1977). As emphasized by Krylov (2002), Zaliznyak's approach was highly innovative in dispensing with the construct of the morpheme and putting the notion of paradigm centre stage, presaging the rise of 'word-and-paradigm' and other realizational theories in morphology (commonly traced in the West to the roughly contemporary work of Peter H. Matthews).

In *Russian nominal inflection* (1967), Zaliznyak proposed algorithmic definitions of the categories of case (later further elaborated in Zaliznyak 1973) and gender, inspired by the mathematicians Andrey Kolmogorov and Vladimir Uspensky. The definitions assume a procedure of generalization over contexts

in which different forms of an inflected lexical unit are expected to appear, in close attention to all instances of variation, including accentual differences. Following this procedure, Zaliznyak proposed an analysis in which Russian featured more than the six traditional cases, with additional cases such as the partitive, the locative, and the special adnumeral form. Morphological gender is further defined as a combination of inflectional types characteristic for singular and plural. As a consequence of this definition, the numerous Russian pluralia tantum were analyzed as a special “paired gender” (with the singular and plural forms being homonymous), as opposed to the more traditional feminine, masculine and neutral genders. Zaliznyak also proposed distinguishing between morphological gender, as defined by inflectional type, and syntactic gender, as defined by agreement patterns. For example, Latin *nauta* ‘sailor’ or Russian *voevoda* ‘general’ belong to the inflectional type “*a*-feminina” and thus to the female morphological gender, but are syntactically masculine, as manifested by the agreement markers of the adjectives in *nauta magn-us* (\**magn-a*) ‘big sailor’ and *sil’n-yj* (\**sil’n-aja*) *voevoda* ‘powerful general’. Zaliznyak’s approach to gender and case strongly influenced the typological work of Corbett (1991, 2012) and, more broadly, of the Surrey Morphology Group. Notably, in Corbett (2012) Zaliznyak is cited on 24 pages, which shows the ongoing influence of his work for theoretical linguistics and cross-linguistic comparison.

Zaliznyak also contributed to linguistic typology in a more direct way. In a joint paper with his wife and lifelong intellectual partner Elena Paducheva (Zaliznyak & Paducheva 1975) they proposed a typology of relative clauses in the vein of Émile Benveniste’s work. This was exemplified by a number of old and modern Indo-European and Semitic languages and Hungarian. In particular, Zaliznyak & Paducheva pinpointed an “archaic subtype” of relative clause which corresponds to internally headed relative clauses in current theories (with replication of the full NP). They also described the additional functions of relative pronouns – interrogative and deictic. In addition, the proposed typology features a diachronic dimension, including recurrent paths of grammaticalization in different languages. The paper can be considered a precursor to the study of grammaticalization of the kind that would become popular in the 1980s. The paper has been widely used in work on various languages carried out by Soviet and post-Soviet linguists (cf. Boguslavskaya 1989; Lyutikova 1999). Regrettably, due to the fact that the paper was published in Russian, combined with the limited communication between the Soviet and Western linguists, Zaliznyak and Paducheva’s typology remained largely unnoticed outside the USSR. This was all the more unfortunate given the explosively growing attention to the cross-linguistic variation in relative clauses in the 1970s and 1980s (cf. Keenan & Comrie 1977; Lehmann 1984).



Further building on his paradigm-centred approach to morphology, in the 1970s Zaliznyak increasingly turned his attention to the synchrony and diachrony of Russian stress. His first major breakthrough was a series of papers on the 14<sup>th</sup> century Russian manuscript *Merilo Pravednoe*, which exhibits a complex interaction of stress patterns and vowel quality that had not been noticed before (Zaliznyak 1978a; Zaliznyak 1978b; Zaliznyak 1979a). Zaliznyak summarized his findings in his book *From Proto-Slavic stress to Russian* (Zaliznyak 1985), where he once again produced an elegant system that makes it possible to determine the stress of a word by using a simple derivational algorithm based on the accentual specifications of its constituent morphemes. His analysis builds on previous work by Paul Garde and Vladimir Dybo, and is also related to the Basic Accentuation Principle posited for Proto-Indo-European by Kiparsky & Halle (1977). However, in contrast to these earlier works, which often concentrate on a handful of carefully chosen illustrative examples, Zaliznyak made all the refinements required to produce a full account, both diachronic and synchronic, of the entirety of the Old Russian data. For almost 30 years, the index to Zaliznyak's book served as the best historical accentological dictionary of Russian, until it was surpassed by a dedicated dictionary published as Zaliznyak (2014).

Another major contribution to the linguistic history of the Slavic languages is *The Old Novgorod Dialect* (Zaliznyak 1995/2004), a description of the until then unknown – or perhaps undescribed – linguistic variety. It had been known for some time that the medieval Northern Russian texts included traces of a separate Old East Slavic linguistic variety, but these were very scarcely attested and often obscured by standard Church Slavonic norms. Zaliznyak made a brilliant decision to search for further traces of this variety in the so-called birchbark documents. Birchbark documents (*berestjanye gramoty*) are mostly short business and private letters, that were first discovered by archeologists in 1951 primarily in the vicinity of the city of Novgorod in North-Western Russia. This is the territory of the former Novgorod Republic, a political entity that existed from the 11<sup>th</sup> to the 15<sup>th</sup> century, and the birchbark letters could thus be considered unique vestiges of the colloquial vernacular spoken there. However, before Zaliznyak turned his attention to the birchbark documents in the early 1980s, they had not been studied as a major source of data on this variety. Instead, the prevailing view on the birchbark letters was that they had been written by barely literate people or even by non-native speakers of Old Russian. Zaliznyak established beyond doubt that the vast majority of the birchbark letters were written according to a graphic system different from the one used in the Church Slavonic-oriented books, and that beyond these rules, quite strictly defined and presumably taught to the pupils, they contain very few mistakes or slips of the pen. This discovery was helped

by Zaliznyak's earlier strict definition of the *grapheme* and of the terminological difference between *graphic system* and *orthography* (Zaliznyak 1979b). The birchbark corpus revealed that the Old Novgorod dialect featured phenomena unknown anywhere in the Slavic world outside this variety — such as the non-palatalizing suffix *-e* in the nominative singular of masculine *o*-stems (as opposed to *-ь* everywhere else), or the lack of the second palatalization of velars — and that these traits persisted in vernacular speech until a very late period. Some of Zaliznyak's discoveries in the field go beyond the Old Novgorod dialect proper and hold for the entirety of Old East Slavic; this applies notably to the syntax and lexicon, as the traditional Old Russian corpus represents colloquial syntax and everyday lexicon very poorly.

Another major discovery aided by his work on the Old Novgorod documents was Zaliznyak's description of the system of Wackernagel (second-position) enclitics in Old Russian. Although the clitic systems of other Slavic languages are well known in the typological and theoretical literature, the Old Russian system had gone largely unrecognized, due to the paucity of truly vernacular sources and the preponderance of written records where its operation was disrupted by factors such as Church Slavonic influence. Zaliznyak's work on the birchbark letters, coupled with his discovery of strict principles of clitic placement in previously known sources, culminated in *Old Russian enclitics* (Zaliznyak & Moloshnaya 1963), an exhaustive, formalized description of the system and its historical development towards Modern Russian. Although Zaliznyak's interest here, like in so many other cases, was not primarily theoretical or typological, the depth and lucidity of the description bears comparison to the most detailed descriptions in the literature — and that is despite being based on a historical corpus.

Many of Zaliznyak's numerous contributions to Russian historical linguistics were to prove useful when he addressed the notoriously vexed issue of the authenticity of the Old Russian text known as *The Tale of Igor's Campaign*. This literary work was discovered in the late 18<sup>th</sup> century, but the original manuscript perished in the Moscow fire of 1812. With the success of James Macpherson's Ossian cycle and the controversy over its authenticity fresh on everyone's minds, some hailed the *Tale* as a Russian counterpart to the best epic poetry of Europe and proclaimed it part of the cultural canon (among other works, it inspired Alexander Borodin's opera *Prince Igor*), whilst others suspected it of being a forgery. Zaliznyak (2004; third edition 2008) marshalled the linguistic arguments speaking in favour of the *Tale* being a genuine Old Russian composition. Although many of these arguments had been made before by scholars since at least Roman Jakobson, some built on his own work. This book, together with his outspokenness against pseudoscientific falsities

circulating in Russian society, brought Zaliznyak fame outside the circles of linguistics, earning him numerous awards for his public engagement work. In later years, Zaliznyak's annual lectures on the year's findings of birchbark letters in Novgorod and elsewhere — always a highlight of the year for scholars working in the field — were to become a major event in Moscow's cultural life with an appeal far beyond specialist circles.

Zaliznyak left his mark also as a brilliant teacher and lecturer. The lecture halls were packed not only for his public engagements but also for the courses he taught to university students. In his “Introduction to linguistics” already in the 1970s he used Russian examples to show how synchronically unmotivated patterns could find a simple explanation in historical processes leading to them — an insight that has recently been gaining more and more adherents — or how some of the alternatives in the notoriously difficult plural number patterns (e.g., *proféssory* vs. *professorá* for ‘professors’) could be explained by what we would now call “competing motivations”. Particularly famous were his ‘structure of a language’ courses, in which students, armed only with a few pages describing the language's grammar (‘you can figure out the writing system on your own, I'm sure’, Zaliznyak would say) were able to tackle original texts in languages such as Sanskrit, Old Persian, and Classical Arabic. These courses formed a part of the scholar's rite of passage for many generations of working linguists.



**Figure 1:** Andrey Zaliznyak lecturing in 2010 (photograph taken by Dmitri Sitchinava).

In 1963, Zaliznyak published the paper called “Linguistic problems” (Zaliznyak 1963). In this paper, he described a novel genre of exercises for introductory courses in linguistics — self-contained linguistic problems. They were intended not as a pure exercise in logic, but also as a testing ground for structuralist ideas of how language works. Tasks like “Here are sentences in Albanian and their Ancient Hebrew translations; translate two other sentences from Ancient Hebrew into Albanian” might seem baffling at first, but the data are sufficient to write a toy grammar and a dictionary for the fragment of the language — one only has to assume that sentences in unknown languages are not just random collections of letters or words, but are structured in some way and are susceptible to logic.

Zaliznyak’s innovation has gained ground, not only in teaching linguistics at the university level (cf. Payne 2006), but also in advertising linguistics to high school students. Contests in solving self-contained linguistic problems for high school students have been held in Russia since 1965 and spread to Bulgaria, the US, The Netherlands, Estonia, the UK, Sweden, and many more countries. Since 2003, the International Olympiad in Linguistics (IOL)<sup>2</sup>, has been held yearly. As of now, it unites students from 30 countries of the world. In fact, solving linguistic problems has proven itself to be not just a game, but an auspicious start to a proper linguistics career. For instance, Ksenia Shagal, who took part in the IOL in 2004 and 2005, received ALT’s 2017 Joseph Greenberg Award for her thesis “Towards a typology of participles”. We may also mention that all the four present writers were introduced to linguistics as high school students at the linguistics olympiad in Moscow.

Andrey Zaliznyak has a continuing influence on general linguistics and typology, because of the clarity of his analyses and his combination of careful work on Russian and Slavic with appropriate comparisons with a broad range of languages. His work, from the earliest to the latest, is widely cited. He is a legend in Russia and has been literally worshipped by generations of Russian linguists, on whom he has had a profound impact. This notwithstanding, Zaliznyak always remained a warm, supportive and modest person, completely uninterested in fame and awards, but devoted to science and the quest for truth. A very decent and admirable human being.

Zaliznyak is survived by his wife, Elena V. Paducheva, a famous linguist studying syntax and semantics and also a major figure on the Russian linguistic scene, recently selected as fellow of the Academia Europaea, and by their daughter Anna A. Zaliznyak, a well-known expert in Russian aspectology and semantic typology.

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2 <http://www.ioling.org>



**Figure 2:** The organizational committee for the Fourth Traditional Olympiad in Linguistics and Mathematics: from the left to the right – Andrey Zaliznyak, Alexander Wentzell, Vladimir Uspensky, Alexander Kibrik (Moscow State University, 1968; photograph taken by Vladimir Alpatov).

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